

**Summary of 1992 field surveys  
for Threatened, Endangered and Sensitive plants  
in the  
Hells Canyon National Recreation Area**

**by**

**Robert K. Moseley and Michael Mancuso**

**Conservation Data Center  
Nongame/Endangered Wildlife Program**

**September 1992**

**Idaho Department of Fish and Game  
600 South Walnut, P.O. Box 25  
Boise, Idaho 83707  
Jerry M. Conley, Director**



**Cooperative Challenge Cost-share Project  
Wallowa-Whitman National Forest  
Idaho Department of Fish and Game**

**Challenge Cost-share No. 6-92-16-101**



## TABLE OF CONTENTS

TABLE OF CONTENTS .....	i
LIST OF APPENDICES .....	i
INTRODUCTION .....	1
DISCUSSION	
<span style="display: inline-block; vertical-align: middle; margin-right: 10px;"> <i>sensitive</i>  <i>1,4,6</i>  <i>C2</i>  <i>1,4,6</i> </span> <i>Halimolobos perplexa</i> var. <i>perplexa</i> .....	1
<span style="display: inline-block; vertical-align: middle; margin-right: 10px;"> <i>1,4,6</i>  <i>C2</i>  <i>1,4,6</i> </span> <i>Leptodactylon pungens</i> ssp. <i>hazeliae</i> .....	2
<span style="display: inline-block; vertical-align: middle; margin-right: 10px;"> <i>1,4,6</i>  <i>C2</i>  <i>1,4,6</i> </span> <i>Pityrogramma triangularis</i> .....	3
<i>Ribes wolfii</i> .....	3
<i>Rubus bartonianus</i> .....	4
<i>Teucrium canadense</i> var. <i>occidentale</i> .....	5
REFERENCES .....	5

## LIST OF APPENDICES

- Appendix 1. 1992 locations of and survey routes for Threatened, Endangered and Sensitive plants in the Hells Canyon National Recreation Area.
- Appendix 2. List of areas surveyed within the Hells Canyon National Recreation Area during the 1992 field investigation.
- Appendix 3. Conservation Data Center Element Occurrence Records.

## Habitat

Puzzling halimolobos occurs in open grassland and woodland communities from about 3500 feet to nearly 7000 feet. The substrate is generally small diameter, unstable scree. The Cold Springs population occurs on a basalt substrate, although it is also known from granite in Little Granite Creek pRNA.

## Conservation Status and Management

Puzzling halimolobos is relatively widespread within its narrow range. Because of its narrow range, it is considered sensitive in Regions 1, 4, and 6 of the Forest Service and by the Idaho BLM (Moseley and Groves 1992). It is also generally enhanced by activities that disturb the soil and create unstable substrates.

### *Leptodactylon pungens* ssp. *hazeliae* (Hazel's prickly phlox)

## Distribution

Hazel's prickly phlox is known from two populations in Oregon and five populations in Idaho (Meinke 1988; Moseley 1989). In Idaho, one population is known from the Payette NF, just upstream from Eagle Bar along Hells Canyon Reservoir, one population is known from private land near Riggins, in the Salmon River Canyon, and two populations are known from Hells Canyon NRA (Moseley 1989). One population was discovered in 1992, on BLM and private land in the Clearwater River canyon in Lewis County. During 1992, we revisited the two known NRA populations, but found no new sites. We had similar results in 1991 and 1988 searches (Moseley 1988; Mancuso and Moseley 1991) when no new populations were found in the NRA despite considerable area being covered. The two NRA populations, Granite Creek (001) and Suicide Point (002) both contain very few individuals (14 at Granite Creek and 34 at Suicide Point), although there may be a few more scattered in the most inaccessible parts of its cliff habitat. See Appendix 1 for mapped locations for the two populations and Appendix 3 for further information on population and habitat for the two NRA occurrences.

## Habitat

It grows on vertical cliff faces, on ledges within the cliff bands, and sometimes in loose talus at the very base of a cliff. Very few vascular species are associated with Hazel's prickly phlox, although *Agropyron spicatum*, *Penstemon triphyllus*, and *Glossopetalon nevadense* usually occur in the vicinity.

## Conservation Status and Management

We came to the same conclusion as Johnson and Mattson (1978) that Hazel's prickly phlox is rare in Hells Canyon. Both NRA populations are bisected by the main river trail and individual plants are vulnerable to disturbance by trail maintenance at both sites. The Payette NF population was partially inundated by Hells Canyon Reservoir. Since the populations are so small, even the loss of a few individuals may have deleterious long-term effects to the population. Livestock grazing is probably not a significant threat, due to its relatively inaccessible habitat. Because of its extreme rarity, it is a category 2 candidate for listing under the Endangered Species Act and is a Forest Service Region 1, 4, and 6, and Idaho BLM Sensitive Species (Moseley and Groves 1992). We believe that the Idaho

portion of its range has been relatively well surveyed and that few, if any additional populations will be found in the state. From our point of view, candidate and sensitive species status is warranted by the U.S. Fish and wildlife Service, Forest Service, and BLM.

### ***Pityrogramma triangularis* (gold-back fern)**

#### **Distribution**

Gold-back fern is widely distributed in western North America from southern British Columbia, south to northern Baja California and east to southwestern Utah and southwestern New Mexico (Yatskievych *et al.* 1990). In the Pacific Northwest, it occurs mainly west of the Cascade Range, but is disjunct in southeastern Washington and in Hells Canyon NRA, Idaho County, Idaho (Moseley and Bernatas 1991). In Idaho, it was discovered in Dry Basin in 1988, about one mile downriver from the mouth of Bernard Creek (Moseley and Bernatas 1991). No additional populations were found in 1992. The Dry Basin population consists of only about 25 plants occurring in a 50 ft<sup>2</sup> area immediately adjacent to the trail. See Appendix 1 for the mapped location of the population and Appendix 3 for further population and habitat data.

#### **Habitat**

Gold-back fern is epipetric on a few large metavolcanic boulders in slump debris from an old landslide that covers much of lower Dry Basin. The aspect of the boulders is northwest. Little soil is developed and few other species are associated with it.

#### **Conservation Status and Management**

This is the only known population in Idaho. It is very small and vulnerable to trail widening. The Forest Service should be very careful when developing trail maintenance and construction plans for this section of trail; minimal trail widening, for instance, could easily wipe out most of the population. Livestock grazing is probably not a significant problem for this population. Gold-back fern should be treated as a sensitive species by the Hells Canyon NRA.

### ***Ribes wolfii* (Wolf's currant)**

#### **Distribution**

Wolf's currant is primarily distributed in the southwestern United States, in Arizona, New Mexico, Colorado, and Utah, with disjunct populations clustered in west-central Idaho (Idaho and Valley counties), southeastern Washington (Asotin County), and northeastern Oregon (Wallowa County) (Bingham 1987). In Idaho, it occurs in the northern Seven Devils Mountains of the Hells Canyon NRA and adjacent Nez Perce NF and in the western Salmon River Mountains, east of McCall on the Payette NF. Three populations are known from the Seven Devils on or adjacent to the NRA: McGaffee Cow Camp (001), Old Boise Trail (002), and Cold Springs Cow Camp (003). Although as few as 50 individuals were observed at McGaffee Cow Camp in 1992, this and the Old Boise Trail populations need additional survey of the ridges to the north to more fully determine their extent. At least 1000 individuals occur at the Cold Springs Cow Camp population. Further surveys in the Seven

Devils and on the adjacent Nez Perce NF, as well as the Payette NF are needed to gain a better understanding of the distribution and abundance of Wolf's currant in Idaho. See Appendix 1 for the mapped locations of the populations and Appendix 3 for further population and habitat data.

#### Habitat

Wolf's currant occurs in open, park-like woodlands in the *Pseudotsuga menziesii*, *Abies grandis* and *A. lasiocarpa* zones. It does not appear to occur in denser forested stands or in openings with full sunlight. The three known sites occur on rounded ridgelines, with gentle slopes and relatively deep soils. Although it occurs with other shrubs, the understory does not consist of a dense shrub layer. The elevations ranges for the known populations in the Seven Devils are from 5600 to about 7000 feet. It should be noted that four other species of *Ribes*, *R. lacustre*, *R. viscosissimum*, *R. cereum*, and *R. montigenum*, all occur in or adjacent to habitats occupied by Wolf's currant.

#### Conservation Status and Management

The northern Seven Devils Mountains of the Hells Canyon NRA harbor most of the known sites of Wolf's currant in Idaho. Additional surveys are needed farther south in the Seven Devils of the NRA, in adjacent areas of the Nez Perce NF, and in the Salmon River Mountains on the Payette NF to more fully determine the complete distribution, abundance, and conservation status of Wolf's currant in Idaho. It remains rare in the state and should remain on the Forest Service Sensitive Species List for Regions 1 (Nez Perce NF) and 6 (Hells Canyon NRA) and should be added to the Region 4 (Payette NF) list. All three populations have been grazed by livestock in the past, although the effect of this perturbation is unknown. The population structure should be monitored as part of allotment management to determine if grazing is having a deleterious effect on long-term population viability. The long-term stability of its forest-opening habitat should also be part of the monitoring program.

### *Rubus bartonianus* (Bartonberry)

#### Distribution

Bartonberry is a narrow endemic to the southern end of Hells Canyon. In Idaho, it occurs more or less continuously between Kinney Creek on the Payette NF to opposite the mouth of Battle Creek in the Hells Canyon NRA, a distance of about 11.5 river miles. Downstream from this, it is known from three widely disjunct locations. Field surveys for Bartonberry in Idaho are largely complete (Johnson and Mattson 1978; Moseley 1989; Mancuso and Moseley 1991). The only section of the river corridor that remains to be surveyed is between Deep Creek and Brush Creek. We relocated all Bartonberry populations in the NRA from Brush Creek to Pittsburg Landing in 1992, but did not find any new sites. It is locally abundant between Brush Creek and Wild Sheep Rapids, but is found only in the riparian zone of Three and Steep creeks below this. A population was also discovered in Big Canyon Creek during 1991 (Mancuso and Moseley 1991). See Appendix 1 for mapped locations of Bartonberry populations in the NRA and Appendix 3 for the further information on its distribution and habitat.

#### Habitat

Bartonberry occurs in steep, rocky riparian zones of small tributary creeks of the Snake River and on

steep talus and scree slopes on the canyonside, generally with a northerly aspect. These are largely shrub-dominated communities with *Amelanchier alnifolia*, *Ribes velutinum*, *Philadelphus lewisii*, *Sambucus cerulea*, *Celtis reticulata*, *Cornus stolonifera*, and *Clematis ligusticifolia*.

#### Conservation Status and Management

Due to its narrow endemism, it is a sensitive species in Regions 1 and 6 of the Forest Service, and should be added to the regional list in Region 4. Throughout its range in Idaho, trails and roads traverse most populations. A large portion of the population on the Payette NF was flooded by Hells Canyon Reservoir. Only the Big Canyon Creek population discovered in 1991 (Mancuso and Moseley 1991) is isolated from any disturbance.

#### *Teucrium canadense* var. *occidentale* (American wood sage)

##### Distribution

American wood sage is widely distributed in the United States and adjacent parts of Canada and Mexico (Cronquist 1959). In the Pacific Northwest and Intermountain area it is rarely encountered, and until recently was thought to be absent from Idaho (Cronquist 1959; 1984). In Idaho, it is known from along the Snake River in Ada, Canyon, and Washington counties, and in Hells Canyon, Idaho County. The Hells Canyon NRA site was discovered in 1975, at the mouth of Three Creek. We were unable to relocate this collection, but may have been too early as it generally flowers later in the year. No other populations were located during the survey. See Appendix 1 for mapped location of the population in the NRA and Appendix 3 for the further information on its distribution and habitat.

##### Habitat

Throughout its range it occurs along stream banks and in moist bottomlands. In Idaho, it generally occurs in dense, shrub-dominated riparian zones along the Snake River and tributaries. The Three Creek population was also collected in a dense riparian shrub community.

#### Conservation Status and Management

Little is known of the distribution, abundance, and conservation status of American wood sage in Idaho. More information is needed before sound conservation recommendations can be made. Biologists conducting riparian and floristic inventories in Hells Canyon should be on the lookout for this species.

#### REFERENCES

- Bingham, R.T. 1987. Plants of the Seven Devils Mountains of Idaho -- An annotated checklist. General Technical Report INT-219. USDA, Forest Service, Intermountain Research Station, Odgen, UT. 146 pp.

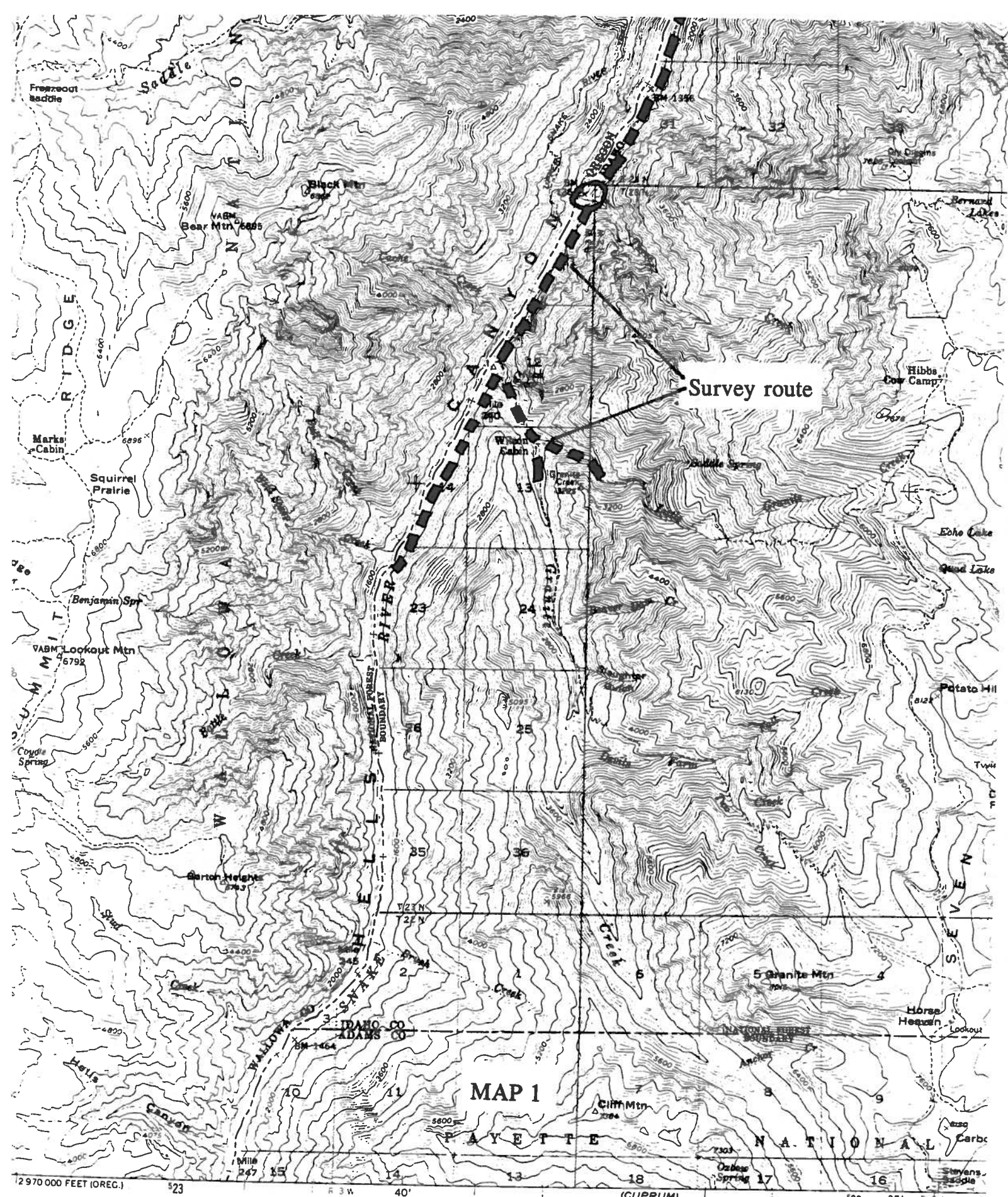
- Cronquist, A. 1959. *Teucrium*. Pages 277-279 In: Vascular Plants of the Pacific Northwest, Part 4, by C.L. Hitchcock, A. Cronquist, M. Ownbey, and J.W. Thompson. University of Washington Press, Seattle.
- Cronquist, A. 1984. *Teucrium*. Pages 303-304 In: Intermountain flora, Volume 4, by A. Cronquist, A.H. Holmgren, N.H. Holmgren, J.L. Reveal, and P.K. Holmgren. The New York Botanical Garden, Bronx, New York.
- Johnson, F.D., and D.J. Mattson. 1978. A survey of sensitive plants of the Snake River corridor, Hells Canyon National Recreation Area, United States Forest Service. University of Idaho, College of Forestry, Wildlife and Range Sciences, Moscow, ID. 114 pp.
- Mancuso, M., and R.K. Moseley. 1991. Summary of 1991 surveys for Threatened, Endangered, and Sensitive plants in the Hells Canyon National Recreation Area. Idaho Conservation Data Center, Nongame/Endangered Wildlife Program, Idaho Department of Fish and Game, Boise, ID. 13 pp., plus appendices.
- Meinke, R.J. 1988. *Leptodactylon pungens* var. *hazeliae* (Polemoniaceae), a new combination for a Snake River Canyon endemic. *Madrono* 35:105-111.
- Moseley, B. 1988. Species management guide for *Lomatium rollinsii*. Natural Heritage Section, Nongame Wildlife/Endangered Species Program, Idaho Department of Fish and Game, Boise, ID. 9 pp., plus appendices.
- Moseley, R.K. 1989. Field investigations of *Leptodactylon pungens* var. *hazeliae* (Hazel's prickly phlox) and *Mirabilis macfarlanei* (Macfarlane's four-o'clock), Region 4 Sensitive Species on the Payette National Forest, with notes on *Astragalus vallis* (Snake Canyon milkvetch) and *Rubus bartonianus* (Bartonberry). Natural Heritage Section, Nongame/Endangered Wildlife Program, Idaho Department of Fish and Game, Boise, ID. 16 pp., plus appendices.
- Moseley, R.K., and S. Bernatas. 1991. Confirmation of *Pentagramma triangularis* in Idaho. *American Fern Journal* 81:66-67.
- Moseley, R., and C. Groves. 1992. Rare, threatened, and endangered plants and animals of Idaho. Conservation Data Center, Nongame and Endangered Wildlife Program, Idaho Department of Fish and Game, Boise, ID. 38 pp.
- Yatskievych, G., M.D. Windham, and E. Wollenweber. 1990. A reconsideration of the genus *Pentagramma* (Adiantaceae) in western North America. *American Fern Journal* 80:9-17.

## Appendix 1

### 1992 locations of and survey routes for Threatened, Endangered and Sensitive plants in the Hells Canyon National Recreation Area.

- Map 1. Survey routes from Wild Sheep Rapids to about Three Creek. Portion of the 1957 He Devil 15' USGS quadrangle.
- Map 2. Survey routes from Three Creek to Pine Bar. Portion of the 1957 He Devil 15' USGS quadrangle.
- Map 3. Survey routes from Pine Bar to about Kirkwood Creek. Portion of the 1954 Kernan Point 15' USGS quadrangle. See Moseley (1988) and Mancuso and Moseley (1991) for survey routes between Kirkwood Creek and Upper Pittsburg Landing.
- Map 4. Location of *Rubus bartonianus* occurrences 005, 006, and 007, and *Leptodactylon pungens* var. *hazeliae* 001. Portion of the 1957 He Devil 15' USGS quadrangle.
- Map 5. Location of *Pityrogramma triangularis* 001 and *Ribes wolfii* 001. Portion of the 1957 He Devil 7.5' US Forest Service-modified quadrangle.
- Map 6. Location of *Rubus bartonianus* 004. Portion of the 1957 He Devil 7.5' US Forest Service-modified quadrangle.
- Map 7. Location of *Leptodactylon pungens* var. *hazeliae* 002. Portion of the 1954 Kernan Point 7.5' US Forest Service-modified quadrangle.
- Map 8. Location of *Ribes wolfii* 003 (in part) and *Halimolobos perplexa* var. *perplexa* 005. Portion of the 1963 Kirkwood Creek 7.5' US Forest Service-modified quadrangle.
- Map 9. Location of *Ribes wolfii* 002 and 003 (in part). Portion of the 1964 Kessler Creek 7.5' USGS quadrangle.

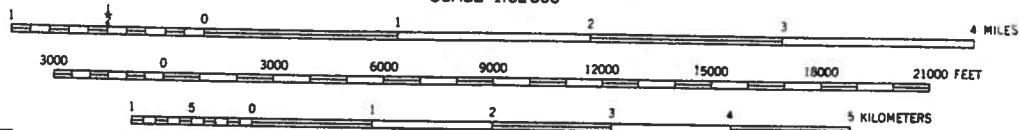
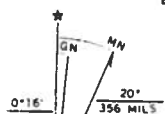


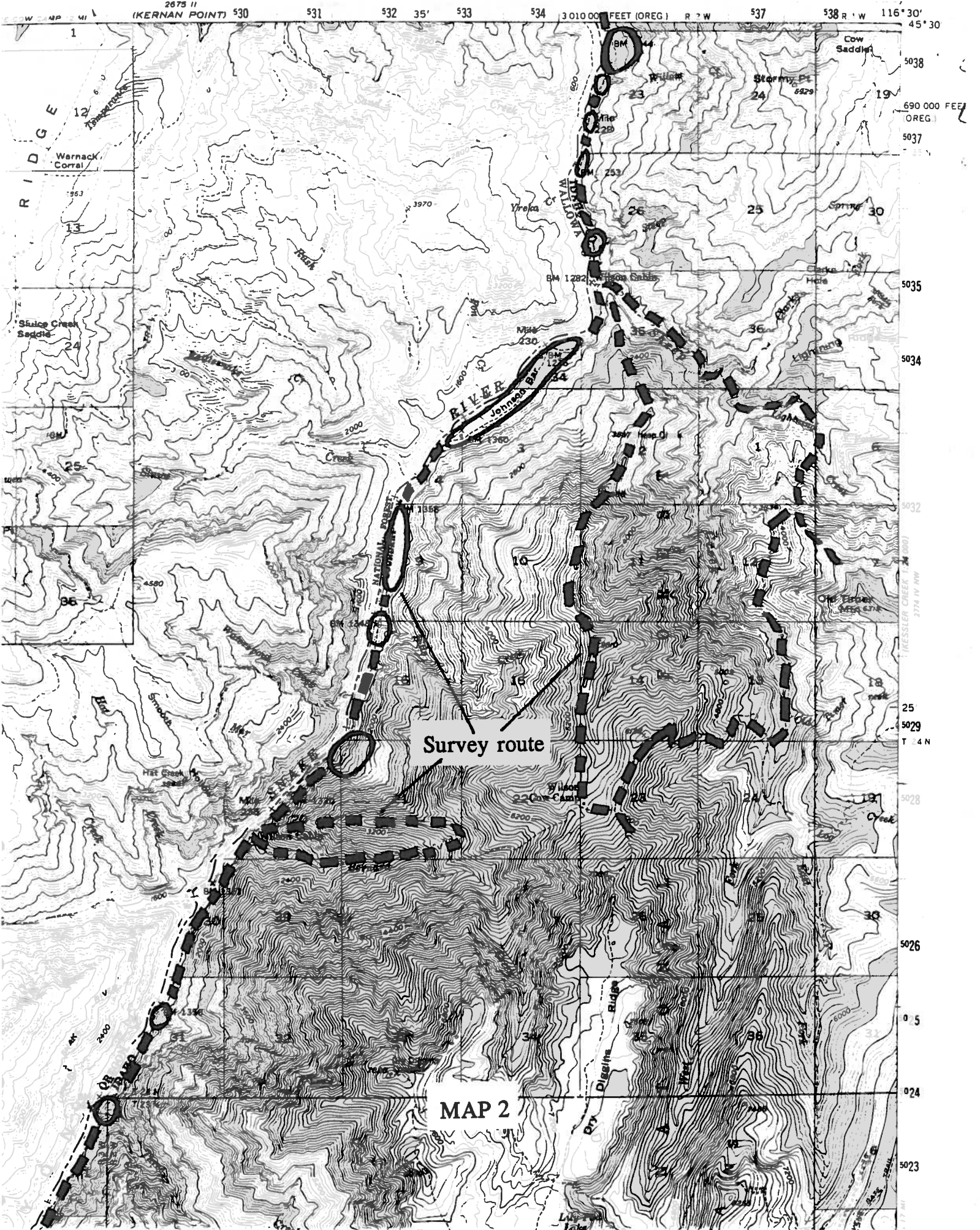


Published by the Geological Survey  
C&GS, and USFS

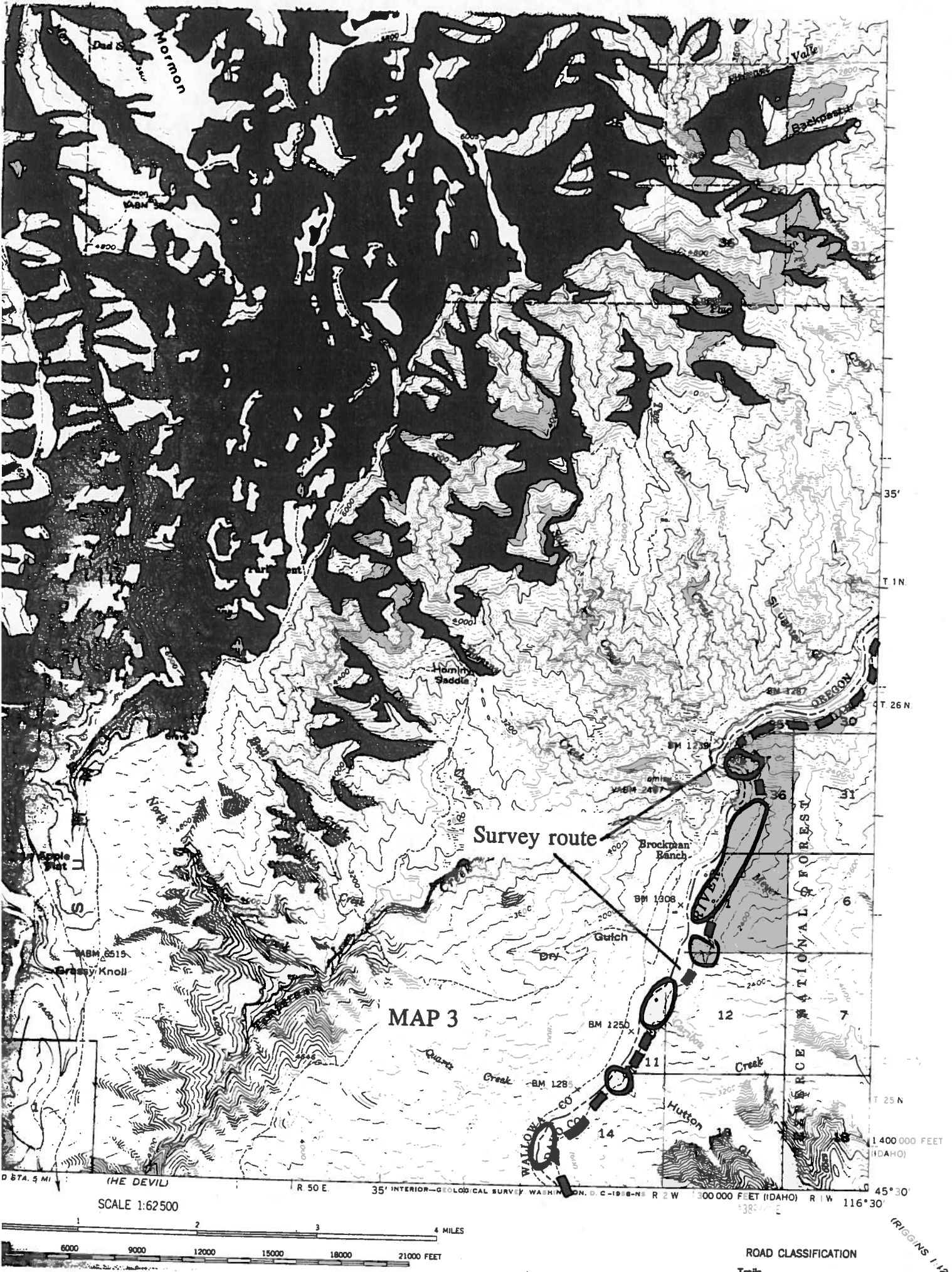
Photographs by multiplex methods  
taken 1953. Field check 1957

1927 North American datum  
used on Oregon coordinate system,  
coordinate system, west zone









MAP 3

35° INTERIOR—GEOLOGICAL SURVEY WASHINGTON, D. C.—1918—S-N-E R 2 W

45° 30' N

116° 30' W

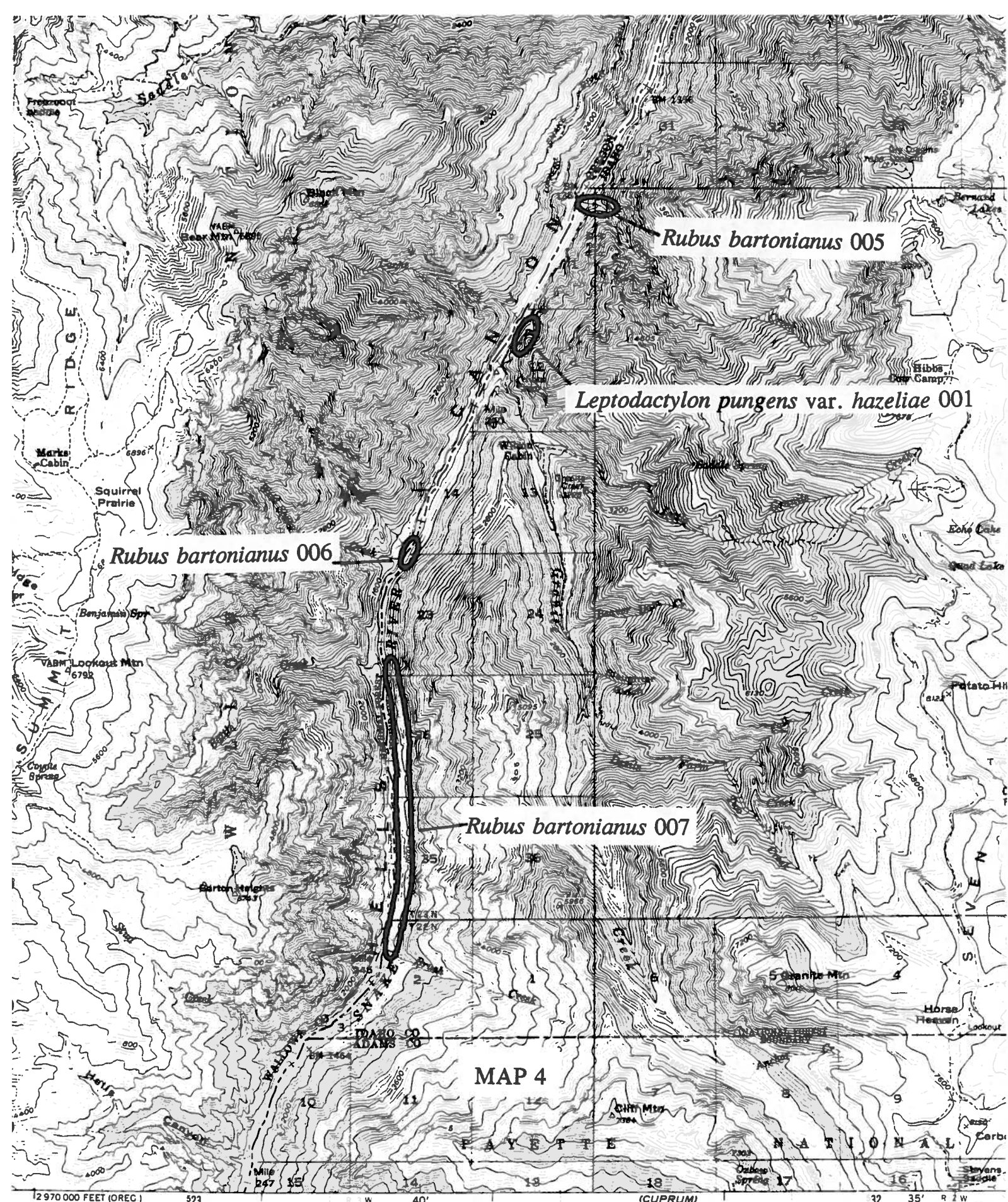
SCALE 1:62500

0 1 2 3 4 MILES

6000 9000 12000 15000 18000 21000 FEET

ROAD CLASSIFICATION

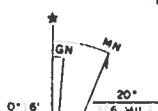
1:62,500

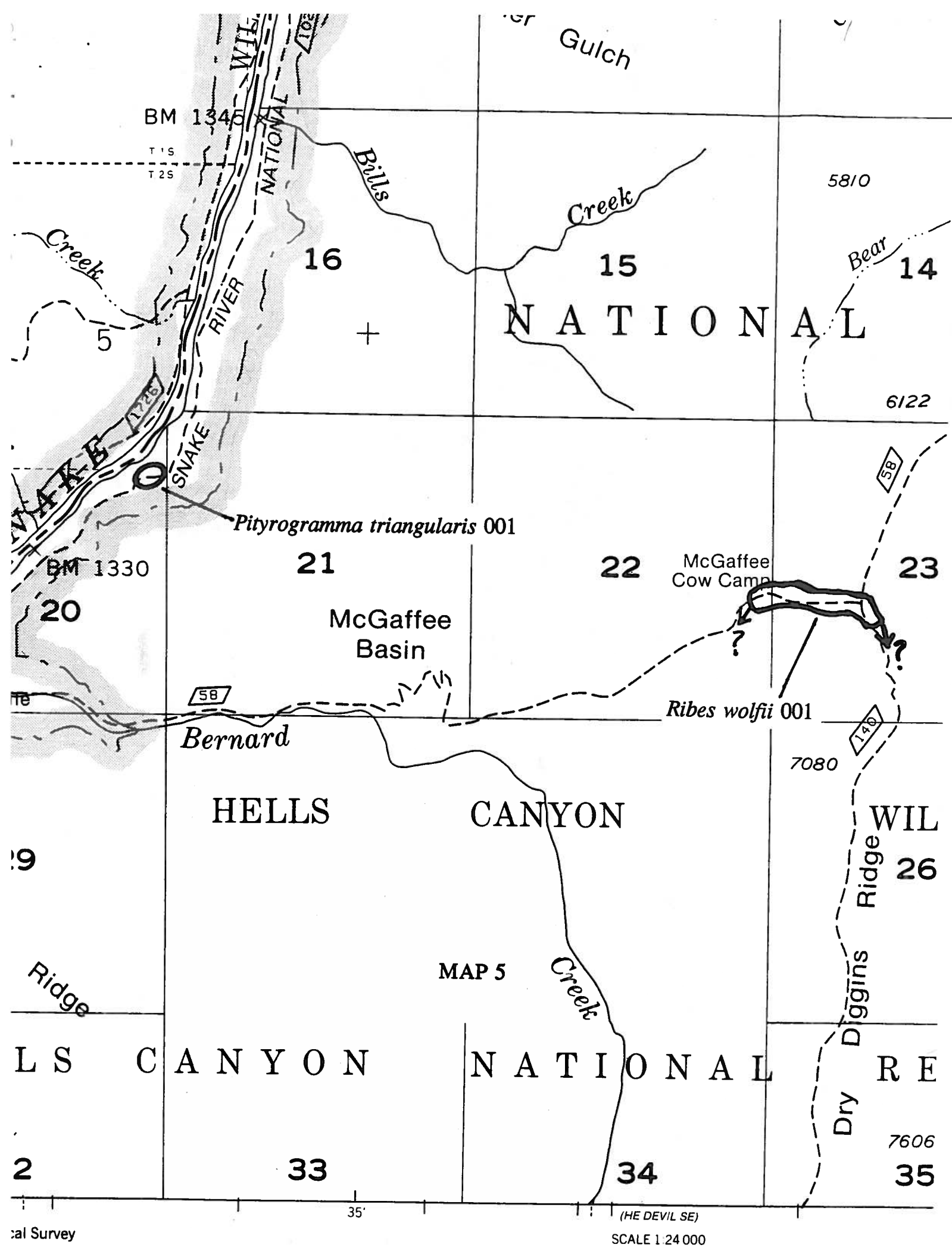


and published by the Geological Survey  
USC&GS, and USFS

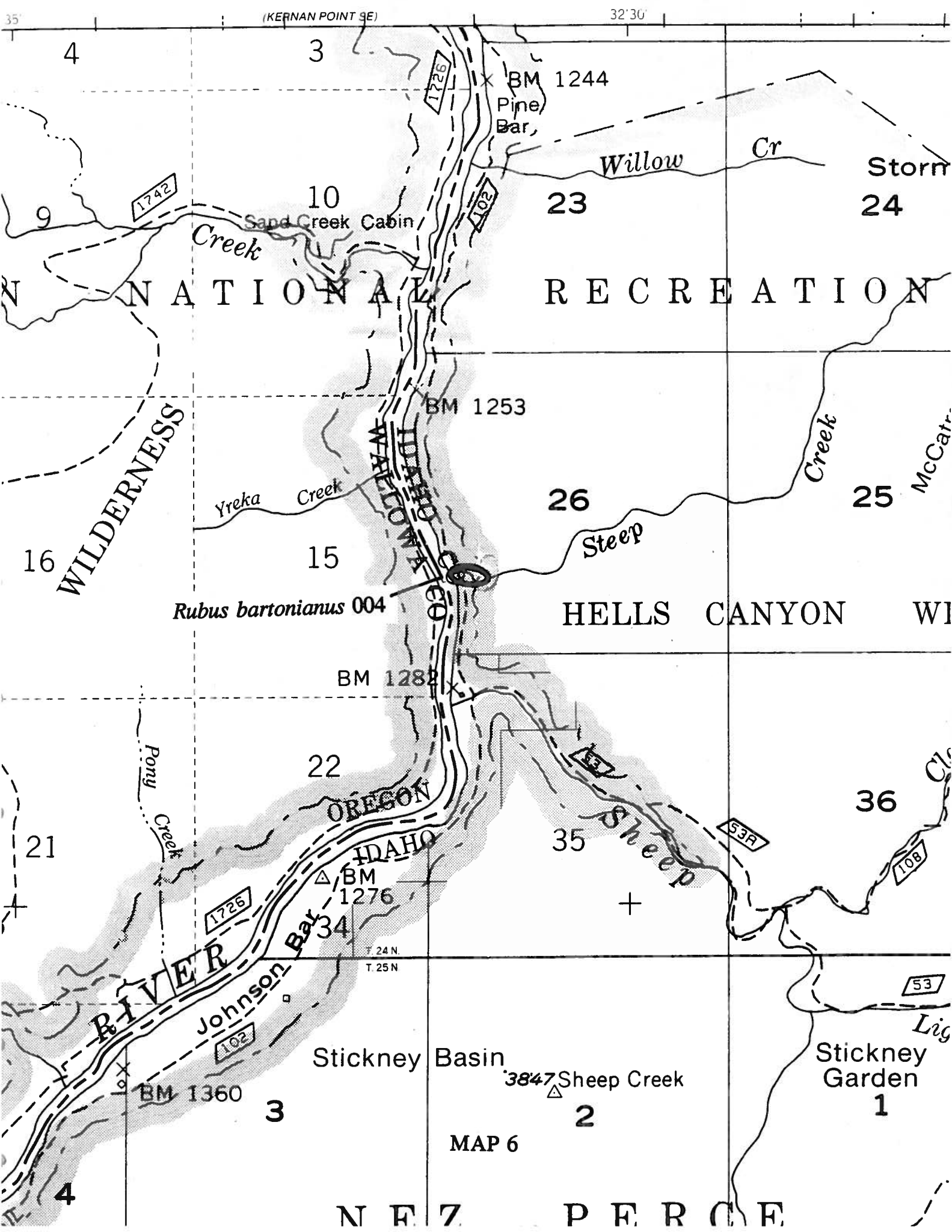
erial photographs by multiplex method  
is taken 1953. Field check 1957

on. 1927 North American datum  
based on Oregon coordinate system  
Idaho coordinate system, west zone









HELLS CANYON NATIONAL RECREATION AREA

Snake River

Willow Cr

Storn

24

23

10 Sand Creek Cabin

1742

9

3

4

35

(KERNAN POINT SE)

32'30"

BM 1244

Pine Bar

1726

102

1726

16

WILDERNESS

Yreka Creek

15

26

Steep

25

McCatr

Creek

21

22

OREGON

IDAHO

BM 1282

Rubus bartonianus 004

BM 1276

34

35

Sheep

53R

36

108

53

Lig

Stickney Garden

1

3847

Sheep Creek

2

MAP 6

Stickney Basin

3

BM 1360

102

1726

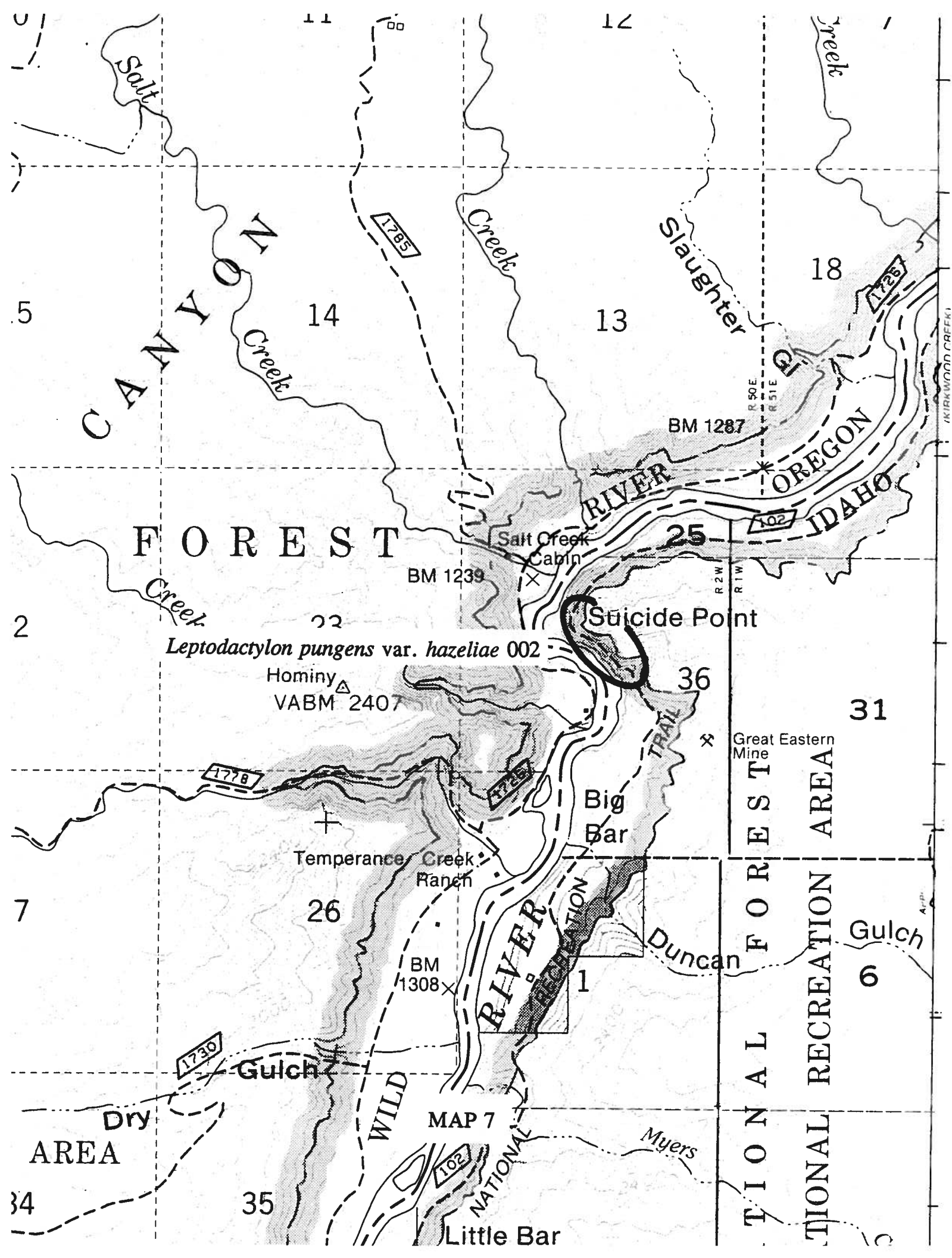
21

Pony Creek

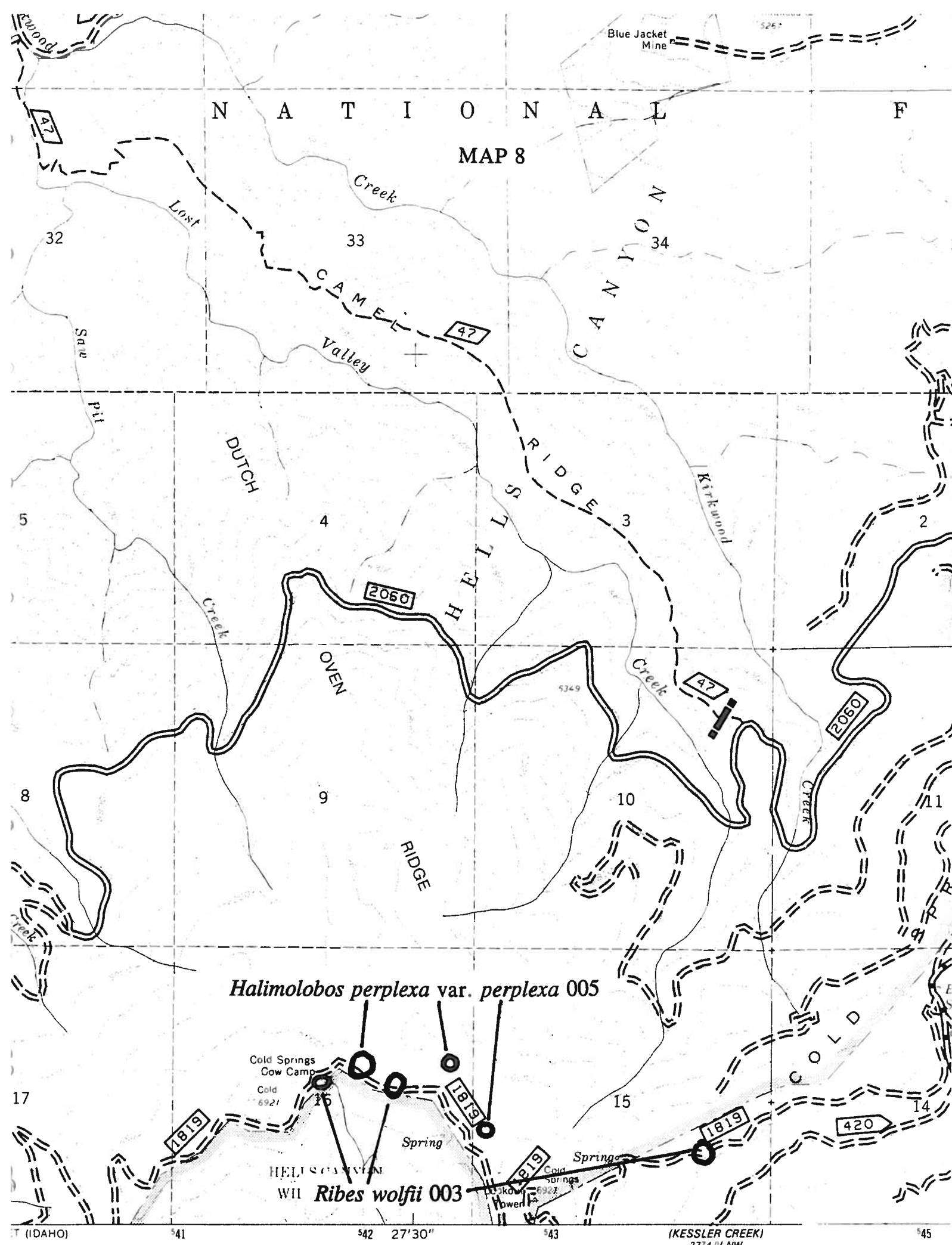
4

NE 7

PERCE



## MAP 8





*Ribes wolfii* 003

*Ribes wolfii* 002'

Round  
Knob

Spring

Crater Lake

## MAP 9

## Appendix 2

### List of areas surveyed within the Hells Canyon National Recreation Area during the 1992 field investigation.

#### Areas surveyed May 12 - 16 (low elevations in the canyon):

- o Generally, the river corridor from Wild Sheep Rapids to Upper Pittsburg Landing along the trail. More specifically:
- o Lower Granite and Little Granite creeks to above old Hibbs homestead.
- o Fan and riparian zone at mouth of Three Creek.
- o River bar and sandy slopes at mouth of Blind Canyon.
- o Lower Bernard Creek, and ridge and slope to 3600 feet on north side of Bernard Creek, including McGaffee Basin.
- o Dry Basin, downstream from Bernard Creek.
- o Terrace at mouth of Bills Creek.
- o Terrace at mouth of Weinheimer Gulch.
- o Johnson Bar.
- o Sheep Creek Trail to mouth of Old Timer Creek, then up trail to McGaffee Cow Camp, then down divide between Snake River and Sheep Creek to mouth of Sheep Creek.
- o Mouth of Steep Creek.
- o Alluvial/colluvial fans/bars and riparian zones between Steep Creek and Pine Bar.
- o Pine Bar.
- o High Bar.
- o Terrace at mouth of Hutton Gulch.
- o Little Bar, mouth of Caribou Creek.
- o Meyers Creek.
- o Big Bar.
- o Suicide Point.

#### Areas surveyed July 11-12 (higher elevations on the Snake-Salmon divide - Cold Springs Mountains):

- o Along FS Road #420 from near Wickiup Butte, south to near Buckhorn Spring.
- o Along FS Road #1819 to west of the Cold Springs Cow Camp area.
- o Ridge and slopes in Cold Springs Cow Camp area.
- o Low Saddle and Saw Pit Saddle areas, via FS Road #2026 and 1819 from Iron Phone Junction.
- o Old Boise Trail #101 as far south as Fire Camp Saddle.

### **Appendix 3**

#### **Conservation Data Center Element Occurrence Records**

Idaho Conservation Data Center  
Element Occurrence Record

HALIMOLOBOS PERPLEXA VAR PERPLEXA  
PUZZLING HALIMOLOBOS

Occurrence Number: 005

Survey Site Name: COLD SPRINGS COW CAMP  
County: Idaho

USGS quadrangle: KIRKWOOD CREEK

Latitude: 45 30 26 N Longitude: 116 27 42 W

Township: 025N Range: 001W  
Section: 16 NE4 and 15 NW4SW4

Location:

Cold Springs Mountains, 0.2 mi E of Cold Springs Cow Camp just ENE across FS road 1819 from the Cold Springs Cow Camp cabin. The population extends to the east to either side of the ridgetop that is NW of the old Cold Springs lookout.

Survey Date: 1992-07-11  
Last Observed: 1992-07-11  
First Observed: 1981

Population Data:

1992: Each of the 2 new subpopulations (S16 SE4NE4 and 15 NW4SW4) on the ridge NW of Cold Springs lookout contain ca 200 individuals; the majority are vegetative, possibly 10% are in fruit or flower.

Habitat Description:

On reddish, weathered, and pillowy basalt. Associated species include *Sedum lanceolatum*, *Allium tolmiei*, *Phacelia heterophylla*, *Thermopsis montana*, *Penstemon* sp.

Elevation: 6620 - 6920 feet

Land Owner/Manager:

Hells Canyon NRA; may be partially within Hells Canyon Wilderness.

Comments:

COLLECTIONS: Bingham 310 (ID). M. Mancuso 700 (ID).

Idaho Conservation Data Center  
Element Occurrence Record

LEPTODACTYLON PUNGENS SSP HAZELIAE  
HAZEL'S PRICKLY PHLOX

Occurrence Number: 001

Survey Site Name: GRANITE CREEK  
County: Idaho

USGS quadrangle: HE DEVIL (15')

Latitude: 45 21 00 N Longitude: 116 39 00 W

Township: 023N Range: 003W  
Section: 12 NW4

Location:

Hells Canyon, 0.25 mi N of Granite Creek along FS Trail #102 on the N end of butress next to the river.

Survey Date: 1992-05-12  
Last Observed: 1992-05-12  
First Observed: 1974

EORANK: B

EORANK Comments: High quality site, few plants.

Population Data:

1974: local on cliffs. 1992: 14 plants seen; all size classes present but most are very large plants. Population is split by a steep gully -- only 2 plants seen N of gully. Plants occur along ca 100 yards of cliff. Moseley checked higher on the cliff but found no plants -- more plants may occur on inaccessible portions.

Habitat Description:

Ledges and cracks on face of vertical to overhanging metavolcanic cliff next to river; W aspect. Associated with *Thelypodium laciniatum*, *Arabis microphylla*, *Glossopetalon nevadense*, *Selaginella wallacei*, *Ribes velutinum gooddingii*, *Sedum leibergii*.

Elevation: 1400 feet

Land Owner/Manager:  
Hells Canyon NRA; Hells Canyon Wilderness.

Comments:

COLLECTIONS: Henderson 1306 (ID).

Within Wild River corridor and Hells Canyon Wilderness.

Idaho Conservation Data Center  
Element Occurrence Record

LEPTODACTYLON PUNGENS SSP HAZELIAE  
HAZEL'S PRICKLY PHLOX

Occurrence Number: 002

Survey Site Name: SUICIDE POINT  
County: Idaho

USGS quadrangle: KERNAN POINT (15')

Latitude: 45 33 02 N Longitude: 116 31 29 W

Township: 026N Range: 002W  
Section: 36 NW4

Location:  
Hells Canyon, Suicide Point, on trail near U.S. Forest Service Sign.

Survey Date: 1992-05-15  
Last Observed: 1992-05-15  
First Observed: 1978

EORANK: B  
EORANK Comments: Small number of plants but relatively secure.

Population Data: 1978: 2 ft tall "spiny" shrub of rocky areas -- relatively rare in canyon. 1992: the population consists of 2 subpopulations. The east subpopulation contains 4 plants, 3 on the face below the trail, 1 adjacent to the trail, and 1 on the trail cut face. The west subpopulation contains 30 plants along and above the trail. The population starts W of a talus-filled gully that bisects the S face of Suicide Point. The trail traverses the face of Suicide Point ca 300-400 vertical feet above the river. It is virtually impossible to assess the upper and lower limits of the population from the trail due to inaccessibility, especially below the trail. Some of the gullies above the trail were checked.

Habitat Description: Cracks and ledges on sheer metamorphic rock faces; E, W, and S exposures; open vegetation. Associated with *Agropyron spicatum*, *Glossopetalon nevadense*, *Festuca megalura*, *Bromus tectorum*, *Triodanis perfoliata*, *Penstemon triphyllus*.

Elevation: 1500 feet Size: 5 acres

Land Owner/Manager: Hells Canyon NRA.

COLLECTIONS: Mattson and Bishoff s.n. (IDF) -- labeled *L. pungens*, annotated to *L. pungens* ssp. *hazeliae* by R. Meinke 3/83.

Within Wild River corridor and Hells Canyon Wilderness. The plant in the east subpopulation adjacent to the trail is vulnerable to disturbance by trail maintenance.

Idaho Conservation Data Center  
Element Occurrence Record

PITYROGRAMMA TRIANGULARIS SSP. TRIANGULARIS  
(= PENTAGRAMMA TRIANGULARIS)  
GOLD-BACK FERN

Occurrence Number: 001

Survey Site Name: DRY BASIN  
County: Idaho

USGS quadrangle: HE DEVIL (15')

Latitude: 45 24 37 N Longitude: 116 35 51 W

Township: 024N Range: 002W

Section: 20 NE4

Location:

Rock outcrop immediately adjacent to (above) the Snake River Trail in Dry Basin, N of Bernard Creek in the Hells Canyon Wilderness.

Survey Date: 1992-05-13  
Last Observed: 1992-05-13  
First Observed: 1988

Population Data:

1988 and 1992: ca 25 normal genets. Wide range of size classes. No plants were seen below the trail. Most epipteric ferns in the canyon have already dried out this year (due to lack of rain?) -- P. triangularis is no different. It appears that it did sporulate this year, however.

Habitat Description:

Dry (xeric), 35% to vertical, NW-aspect, open light. Vertical cracks and ledges in metavolcanics; slight soil accumulation in cracks. On and between large boulders partially buried in slump debris from large (old) landslide material that comprises most of the lower part of Dry Basin. *Woodsia oregana* close by. With *Selaginella wallacei* and moss.

Elevation: 1500 feet Size: 50 ft<sup>2</sup>

Land Owner/Manager:  
Hells Canyon NRA; Hells Canyon Wilderness.

Comments:

COLLECTIONS: Moseley and Bernatas 1238 (ID).

Within Wild River corridor. Widening of trail could easily threaten population.

Idaho Conservation Data Center  
Element Occurrence Record

RIBES WOLFII  
WOLF'S CURRANT

Occurrence Number: 001

Survey Site Name: McGAFFEE COW CAMP  
County: Idaho

USGS quadrangle: HE DEVIL (15')

Latitude: 45 24 15 N Longitude: 116 33 10 W

Township: 024N Range: 002W  
Section: 23 SW4 and possibly 22 SE4

Location:

Along the divide between Bernard Creek and Sheep Creek, N of Dry Diggins Ridge in the northern Seven Devils Mountains. Population is traversed by FS trails 110 and 140 near their junction. Vicinity of McGaffee Cow Camp.

Survey Date: 1992-05-14  
Last Observed: 1992-05-14  
First Observed: 1927

EORANK: A

EORANK Comments: A high quality site that is relatively secure; need more thorough survey of population limits to the west and south.

Population Data:

1992: ca 50 plants seen in full flower; shrub to 2 m tall; appears to be good age class distribution. Plants occur in groups in openings of *Pseudotsuga menziesii* - *Abies grandis* forest along ridgeline. Vegetatively looks very similar to *Physocarpus malvaceus*.

Habitat Description: Ecotone between *Pseudotsuga menziesii* and *Abies grandis* series habitat types. Associated with *Pinus ponderosa*, *Holodiscus discolor*, *Ribes viscosissimum*, *Achillea millefolium*, *Smilacina racemosa*, *Physocarpus malvaceus*, *Fragaria vesca*.

Elevation: 5600 - 6400 feet

Land Owner/Manager: Hells Canyon NRA; Hells Canyon Wilderness.

Comments:

COLLECTIONS: St. John & Mullen 8390 (WS)

Population should be monitored; the long-term stability of its forest-opening habitat should be part of the monitoring program.



Idaho Conservation Data Center  
Element Occurrence Record

RIBES WOLFII  
WOLF'S CURRANT

Occurrence Number: 002

Survey Site Name: OLD BOISE TRAIL #101  
County: Idaho

USGS quadrangle: HE DEVIL (15')

Latitude: 45 28 00 N Longitude: 116 26 45 W

Township: 025N Range: 001W  
Section: 34 NW4, 27 center of N2, 33 SE4; T24N R1W S4 E2NW4

Location:

Along the Old Boise Trail #101, starting ca 1 mile S of the trailhead on FS road 1819 and extending S for ca 2.5 miles.

Survey Date: 1992-07-12  
Last Observed: 1992-07-12  
First Observed: 1992

Population Data:

1992: ca 250 genets, 70% vegetative, 30% in fruit. The population consists of 4 widely separated clusters of plants. Habitat is not continuous but the gaps are not that large. The northern-most subpopulation is by far the largest; the other subpopulations support ca 2-25 plants. Unknown if the population continues south of Fire Camp Saddle. Only the area along the trail was surveyed although in all cases no shrubs were found to extend into adjacent denser forests.

Habitat Description:

Partial shade (not in deep woods or in open); both *Pseudotsuga menziesii*/*Symphoricarpos albus* and *Abies lasiocarpa*/*Carex geyeri* habitat types; various aspects to flat. Associated species include *Ribes lacustre*, *Lonicera utahensis*, *Polemonium pulcherrimum*, *Valeriana sitchensis*, *Castilleja miniata*, *Fragaria vesca*, *Achillea millefolium*, *Rudbeckia occidentalis*. Excellent overall site quality.

Elevation: 6700 - 7080 feet

Land Owner/Manager:  
Hells Canyon NRA; Hells Canyon Wilderness.

Comments:

Trail/road bisects much of the population.

Idaho Conservation Data Center  
Element Occurrence Record

RIBES WOLFII  
WOLF'S CURRANT

Occurrence Number: 003

Survey Site Name: COLD SPRINGS COW CAMP  
County: Idaho

USGS quadrangles: KIRKWOOD CREEK and KESSLER CREEK

Latitude: 45 30 23 N Longitude: 116 27 34 W

Township: 025N Range: 001W  
Section: 16 E2 and 15 S2

Location:

Cold Springs Mountains, along the Cold Springs Road (FS road 1819). Plants are scattered in forested areas from the spring that is just W of Cold Springs Cow Camp cabin south and east for ca 2 miles.

Survey Date: 1992-07-11  
Last Observed: 1992-07-11  
First Observed: 1981

Population Data:

1981: May be as many as 1000 plants extending SE from the spring to ca 1 mi E & SE along road.  
1992: no change. Population is scattered in forested areas for ca 2 miles along the road.

Habitat Description:

Partial shade; rocky hillside; under *Pseudotsuga menziesii*; in an open roadside forest; 20% slope; SW aspect; moderately deep, moist, reddish rocky loam soil. Also beneath and along margins of *Abies lasiocarpa* woodlands. Associated with *Lonicera utahensis*, *Valeriana sitchensis*, *Senecio triangularis*, *Trifolium longipes*, *Ribes lacustre*, *Pedicularis racemosa*, *Symphoricarpos oreophilus*, *Populus tremuloides*.

Elevation: 6420 - 6640 feet

Land Owner/Manager:

Hells Canyon NRA and Nez Perce NF, Salmon River RD; might be partially within Hells Canyon Wilderness.

Comments:

COLLECTIONS: Bingham 306 (ID, IDF, WS), Mancuso 701 (ID).

Idaho Conservation Data Center  
Element Occurrence Record

RUBUS BARTONIANUS  
BARTONBERRY

Occurrence Number: 004

Survey Site Name: STEEP CREEK  
County: Idaho

USGS quadrangle: HE DEVIL (15')

Latitude: 45 28 27 N Longitude: 116 33 08 W

Township: 025N Range: 002W  
Section: 26 SW4

Location:

Lower part of Steep Creek, along the Snake River (about 0.5 mi N of Sheep Creek). Brushy thickets in creek bottom.

Survey Date: 1992-05-15  
Last Observed: 1992-05-15  
First Observed: 1937

EORANK: A

EORANK Comments: Dense stand in a high quality riparian community.

Population Data:

1937: small, slender shrub, 6-8 in high, flowers white. 1975: abundance (on a scale of 1 to 5) = 3.  
1992: 1 plant below trail; common above trail for an unknown distance -- the creek bottom is inaccessible above the lower 200 yards. The plants are in early fruit.

Habitat Description:

Semi-riparian parts of draw had water, but likely dry later in season; moderate slope, W exposure; very high gradient drainage; boulder substrate. Associated with *Philadelphus lewisii*, *Sambucus cerulea*, and *Amelanchier alnifolia* under *Celtis reticulata*. 1992: the creek bed has been dry for several years below a dry falls; water was flowing above the falls.

Elevation: 1300 - ? feet Size: 5+ acres

Land Owner/Manager: Hells Canyon NRA; Hells Canyon Wilderness.

Comments:

COLLECTIONS: Henderson 1356 (ID); Johnson s.n. (IDF, others); J. Packard (WS); Constance 1818 (WTU); F. Meyer 846 (WS); Christ 15156 (ID).

At least partially within Wild River corridor.

Idaho Conservation Data Center  
Element Occurrence Record

RUBUS BARTONIANUS  
BARTONBERRY

Occurrence Number: 005

Survey Site Name: THREE CREEK  
County: Idaho

USGS quadrangle: HE DEVIL (15')

Latitude: 45 22 03 N Longitude: 116 38 16 W

Township: 023N Range: 003W  
Section: 01 NE4NE4

Location:

Hells Canyon Wilderness, riparian vegetation along Three Creek where trail 102 crosses the creek.

Survey Date: 1992-05-13  
Last Observed: 1992-05-13  
First Observed: 1978

EORANK: A

EORANK Comments: High quality vegetation.

Population Data:

1992: ca 20 plants seen, just past flower to early fruit. Only seen around trail crossing; none found downstream to mouth; possibly more plants upstream.

Habitat Description:

Very dense riparian vegetation; with *Celtis reticulata*, *Cornus stolonifera*, *Philadelphus lewisii*, *Clematis ligusticifolia*.

Elevation: 1400 feet

Land Owner/Manager:

Hells Canyon NRA; Hells Canyon Wilderness.

Comments:

Within Wild River corridor.

Idaho Conservation Data Center  
Element Occurrence Record

RUBUS BARTONIANUS  
BARTONBERRY

Occurrence Number: 006

Survey Site Name: WILD SHEEP  
County: Idaho

USGS quadrangle: HE DEVIL (15')

Latitude: 45 19 30 N Longitude: 116 40 00 W

Township: 023N Range: 003W  
Section: 23 NE4NW4

Location:

Hells Canyon, across the Snake River from mouths of Wild Sheep and Bull Creeks (Oregon), ca 200 vertical feet above the river.

Survey Date: 1992-05-12  
Last Observed: 1992-05-12  
First Observed: 1978

Population Data:

1992: ca 50 plants in early fruit spread along about 0.25 mile of trail.

Habitat Description:

Steep rocky gullies with *Amelanchier alnifolia*, *Ribes velutinum*, *Philadelphus lewisii*, *Sambucus cerulea*.

Elevation: 1600 feet Size: 10 acres

Land Owner/Manager:

Hells Canyon NRA; Hells Canyon Wilderness.

Comments:

Bingham and Henderson sight record.

Within Wild River corridor.

**Idaho Conservation Data Center  
Element Occurrence Record**

**RUBUS BARTONIANUS  
BARTONBERRY**

**Occurrence Number: 007**

**Survey Site Name: BRUSH CREEK  
County: Idaho**

**USGS quadrangle: HE DEVIL (15')**

**Latitude: 45 17 45 N    Longitude: 116 40 01 W**

**Township: 023N    Range: 003W  
Section: 35 W2, 26 W2; T22N R3W S2 NE4NW4**

**Location:**

**Hells Canyon, between mouth of Brush Creek, N along Snake River to opposite the mouth of Battle Creek (Oregon), ca. 2.25 miles.**

**Survey Date: 1992-05-12  
Last Observed: 1992-05-12  
First Observed: 1978**

**Population Data:**

**1978: widespread and in places the dominant shrub. 1992: not thoroughly checked but habitat still intact and undisturbed.**

**Habitat Description:**

**Margins of open scree slopes and among rock and boulders on the bars and flats. N to NE aspect on moderate (30-50%) slopes.**

**Elevation: 1400-1500 feet    Size: 100+ acres**

**Land Owner/Manager:**

**Hells Canyon NRA; Hells Canyon Wilderness.**

**Comments:**

**Johnson and Mattson sight record.**

**Within Wild River corridor.**

Conservation Data Center  
Element Occurrence Record

TEUCRIUM CANADENSE VAR OCCIDENTALE  
AMERICAN WOOD SAGE

Occurrence Number: 004

Survey Site Name: THREE CREEK  
County: Idaho

USGS quadrangle: HE DEVIL (15')

Latitude: 45 22 03 N Longitude: 116 38 16 W

Township: 023N Range: 003W  
Section: 01 NE4NE4

Location:

Three Creek, a tributary to the Snake River, Hells Canyon Wilderness.

Survey Date: 1992-05-13  
Last Observed: 1975-08-16  
First Observed: 1975

Population Data:

1992: Moseley unable to relocate population -- possibly too early.

Habitat Description:

Creek bottom in dense stand of *Betula occidentalis*; 10% slope; W exposure. Dense riparian zone of high ecological value.

Elevation: 1400 feet

Land Owner/Manager:

Hells Canyon NRA; Hells Canyon Wilderness.

Comments:

COLLECTIONS: F. D. Johnson and T. B. Miller s.n. (IDF) -- confirmed by M. Lazelle 11/75.

Within Wild River corridor.

Submitted by: Robert K. Moreley

Approved by:

**IDAHO DEPARTMENT OF FISH AND GAME**

Tom Reinecker  
Tom Reinecker, Chief  
Bureau of Wildlife

Wayne Melquist 9/27/92  
Wayne Melquist  
State Nongame Wildlife Manager &  
Endangered Species Coordinator